



Oil & Gas Industry Day

February 24, 2015

Utah State Tax Commission



Disclaimer

Forecasted numbers are opinions of value and are subject to significant economic factors unknown or not reported as of January 1, 2015.



Oil & Gas Production/Water Disposal

Discount Rate

Comparable Companies

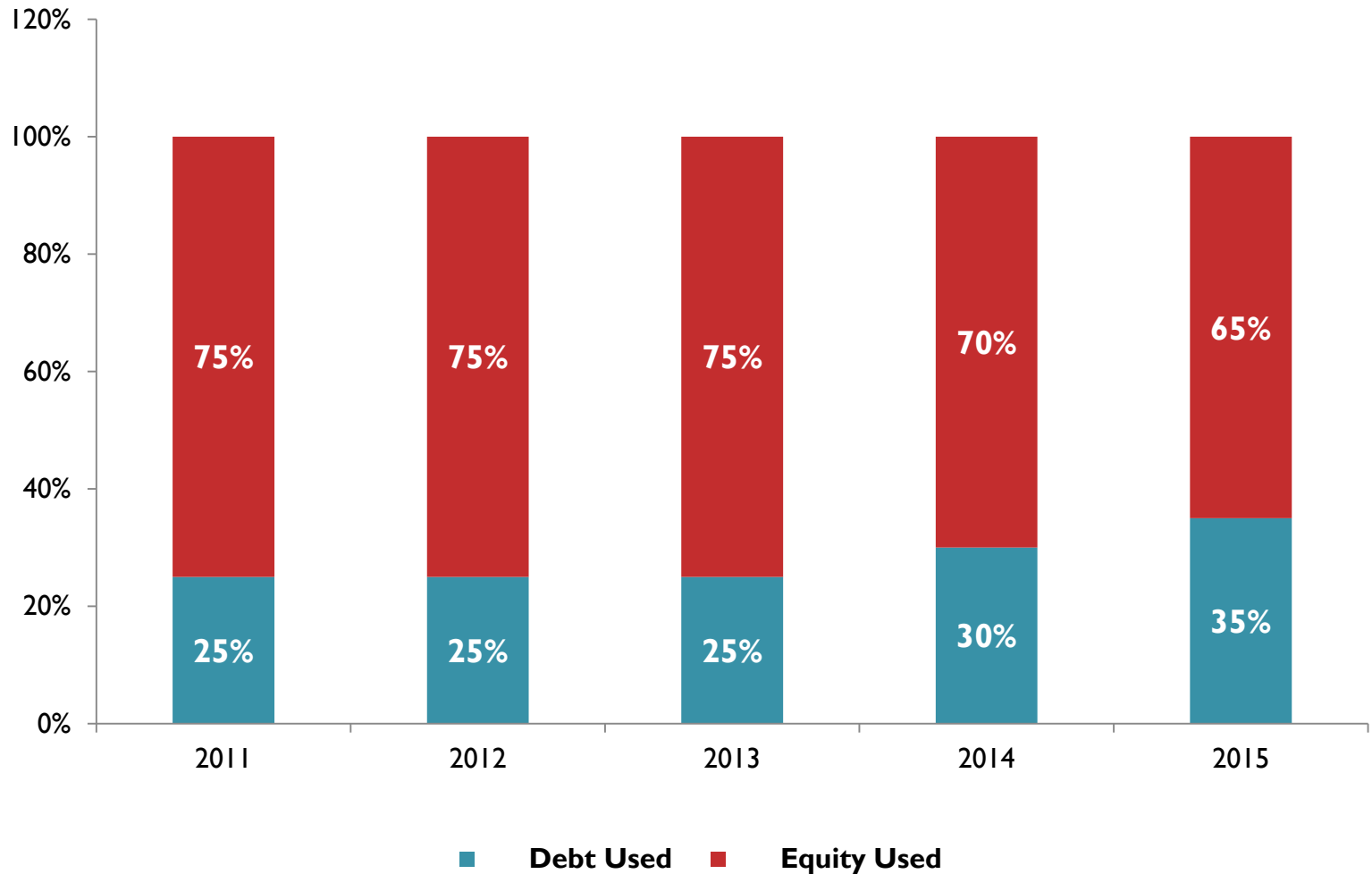
2014

- ABRAXAS PETROL
- BILL BARRETT
- CONTINENTAL RES
- **DOUBLE EAGLE PET & MIN**
- ENCANA CORP.
- **ISRAMCO INC.**
- **KODIAK OIL & GAS**
- LEGACY RESERVES
- LINN ENERGY
- PIONEER NATURAL RES.
- QEP RESOURCES
- RESOLUTE ENERGY CORP
- ULTRA PETROLEUM CORP
- WARREN RESOURCES
- WHITING PETROLUUM
- WPX ENERGY, INC

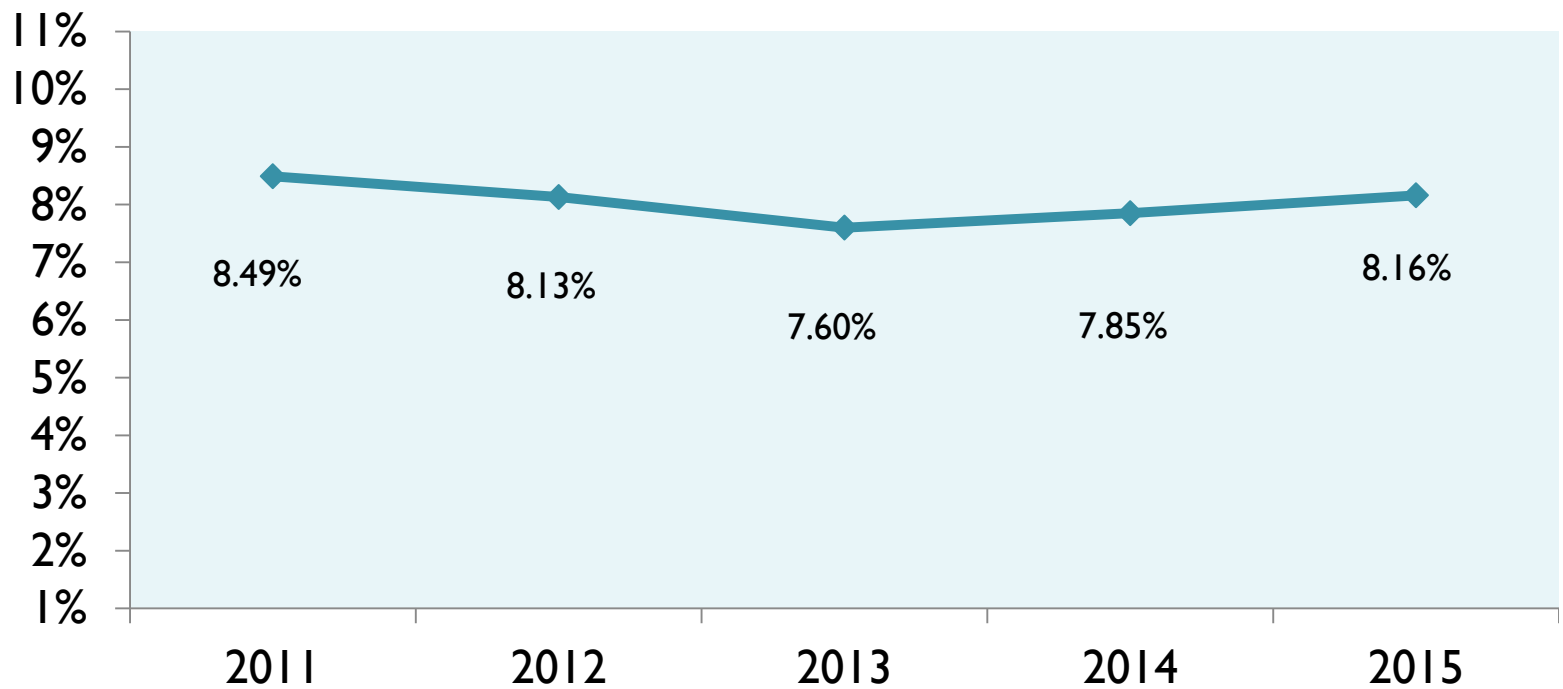
2015

- ABRAXAS PETROL
- BILL BARRETT
- CONTINENTAL RES
- **EARTHSTONE ENERGY**
- **EMERALD OIL INC**
- ENCANA CORP.
- **ESCALERA RESOURCES**
- LEGACY RESERVES
- LINN ENERGY
- **MATADOR RESOURCES**
- **NEWFIELD EXPLORATION**
- PIONEER NATURAL RES.
- QEP RESOURCES
- RESOLUTE ENERGY CORP
- **ROYAL ENERGY INC**
- ULTRA PETROLEUM CORP
- WARREN RESOURCES
- WHITING PETROLEUM
- WPX ENERGY, INC

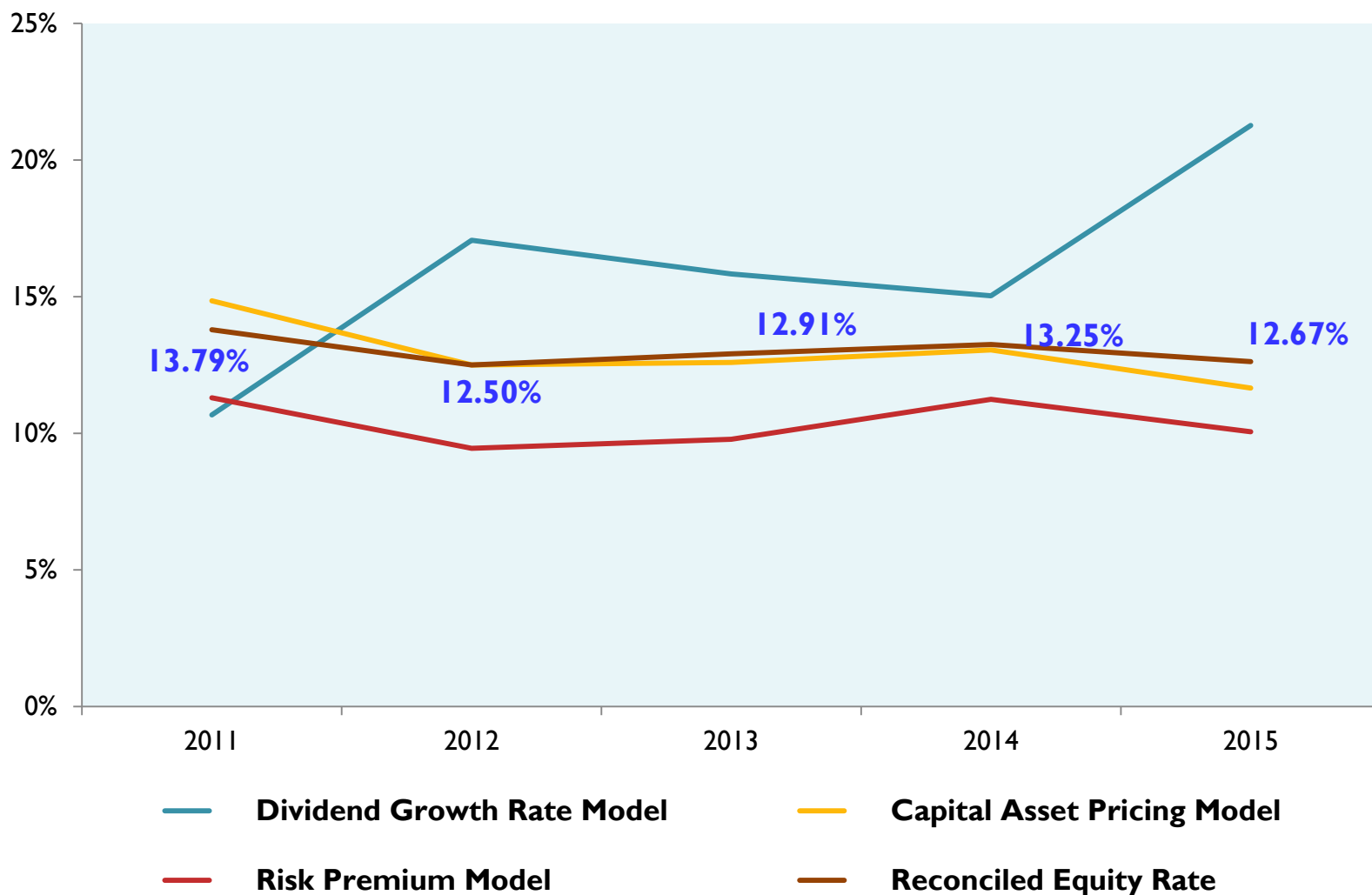
Five Year Capital Structure History



Five Year Debt Rate History



Five Year Equity Rate History



Production/WD Discount Rate

WEIGHTED AVERAGE COST OF CAPITAL DISCOUNT RATE CALCULATION			
	RATE	CAPITAL STRUCTURE	WEIGHTED RATE
DEBT RATE (Ba3)	8.16%	35%	2.86%
EQUITY RATE	12.67%	65%	8.24%
BEFORE TAXES WACC			11.10%



Oil & Gas Gathering

Discount Rate

Comparable Companies

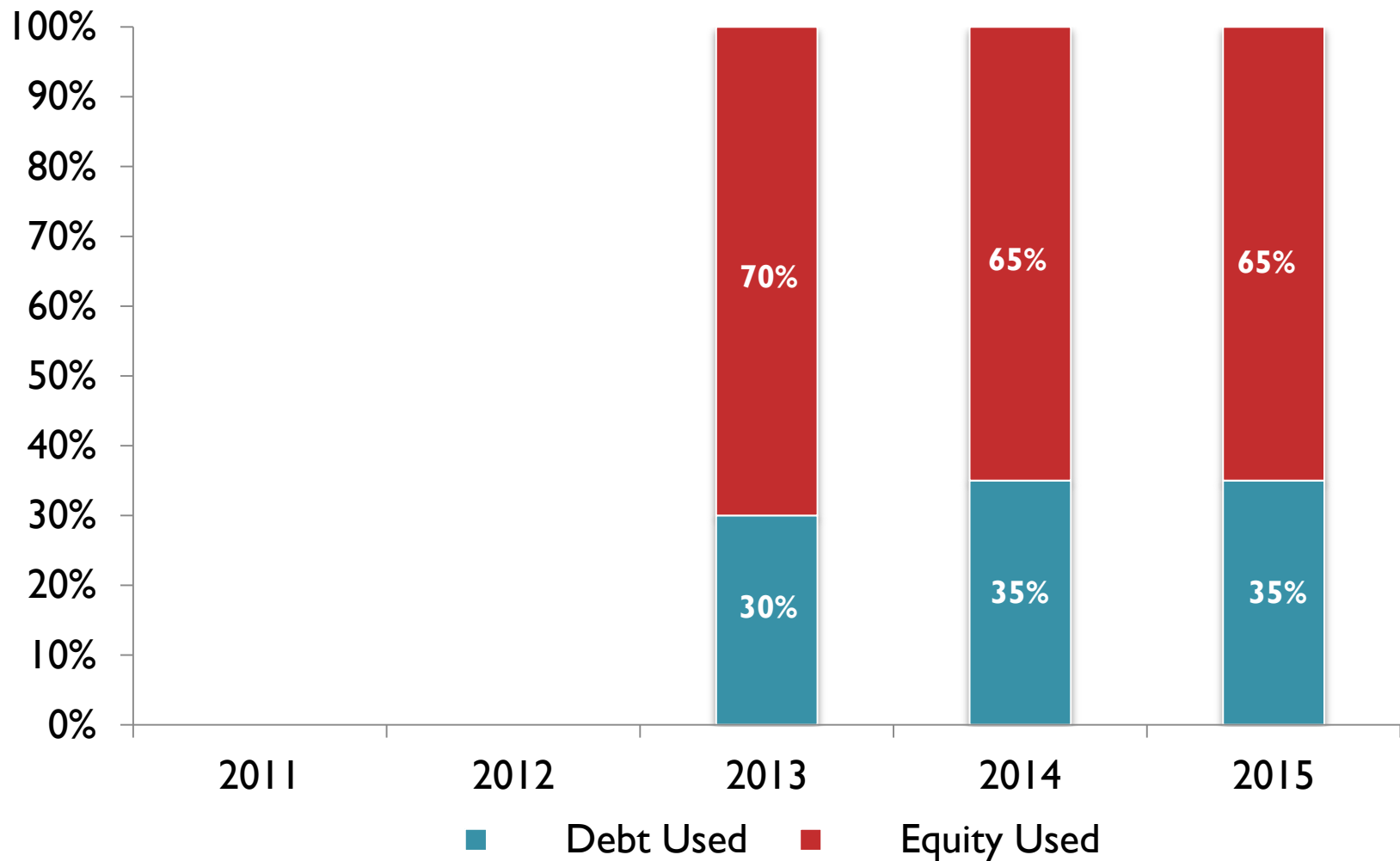
2014

- EL PASO PIPELINE
- ENERGY TRANS. PART.
- KINDER MORGAN EN.
- ONEOK INC.
- PLAINS ALL AMER. PIPE.
- SPECTRA ENERGY
- WILLIAMS PTRS LP

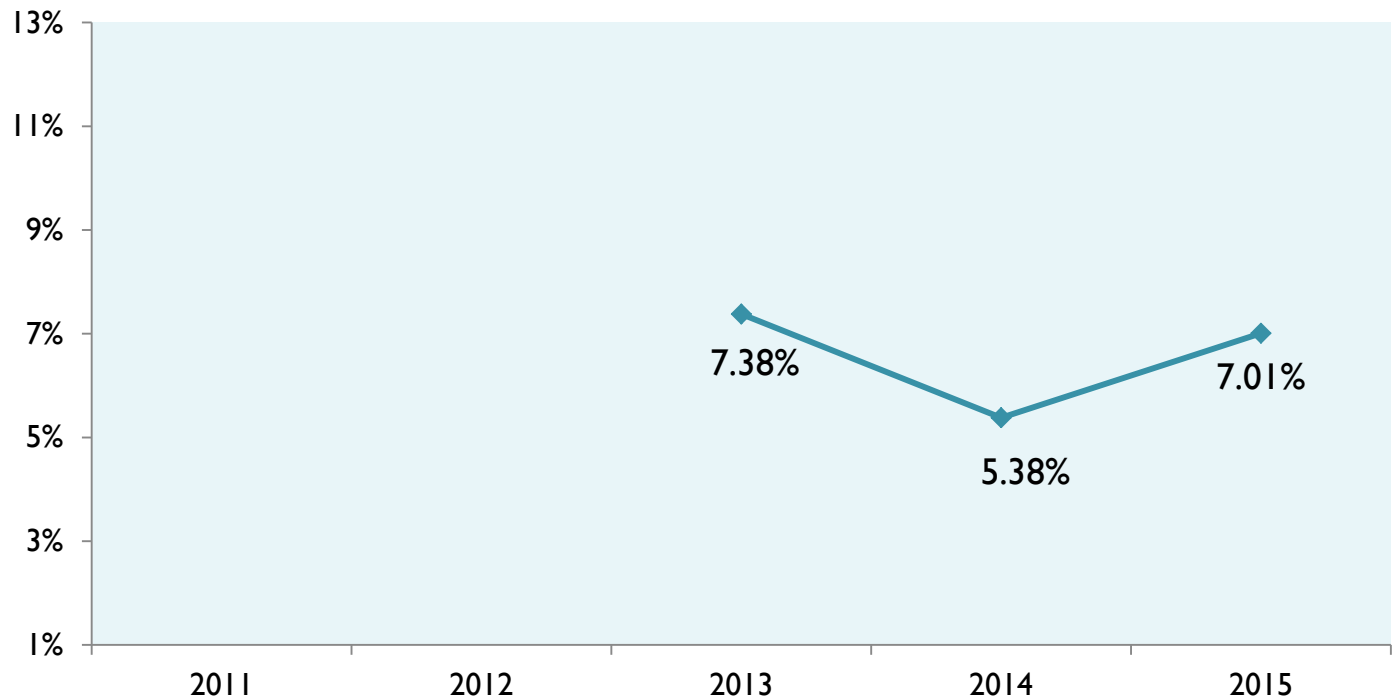
2015

- ACCESS MIDSTREAM
- BLUENIGHT ENERGY
- CRESTWOOD MIDSTREAM
- ENLINK MIDSTREAM
- ONEOK PARTNERS
- PLAINS ALL AMER. PIPE.
- REGENCY ENERGY
- TESORO LOGISTICS LP
- WESTERN GAS PARTNERS
- WILLIAMS COS

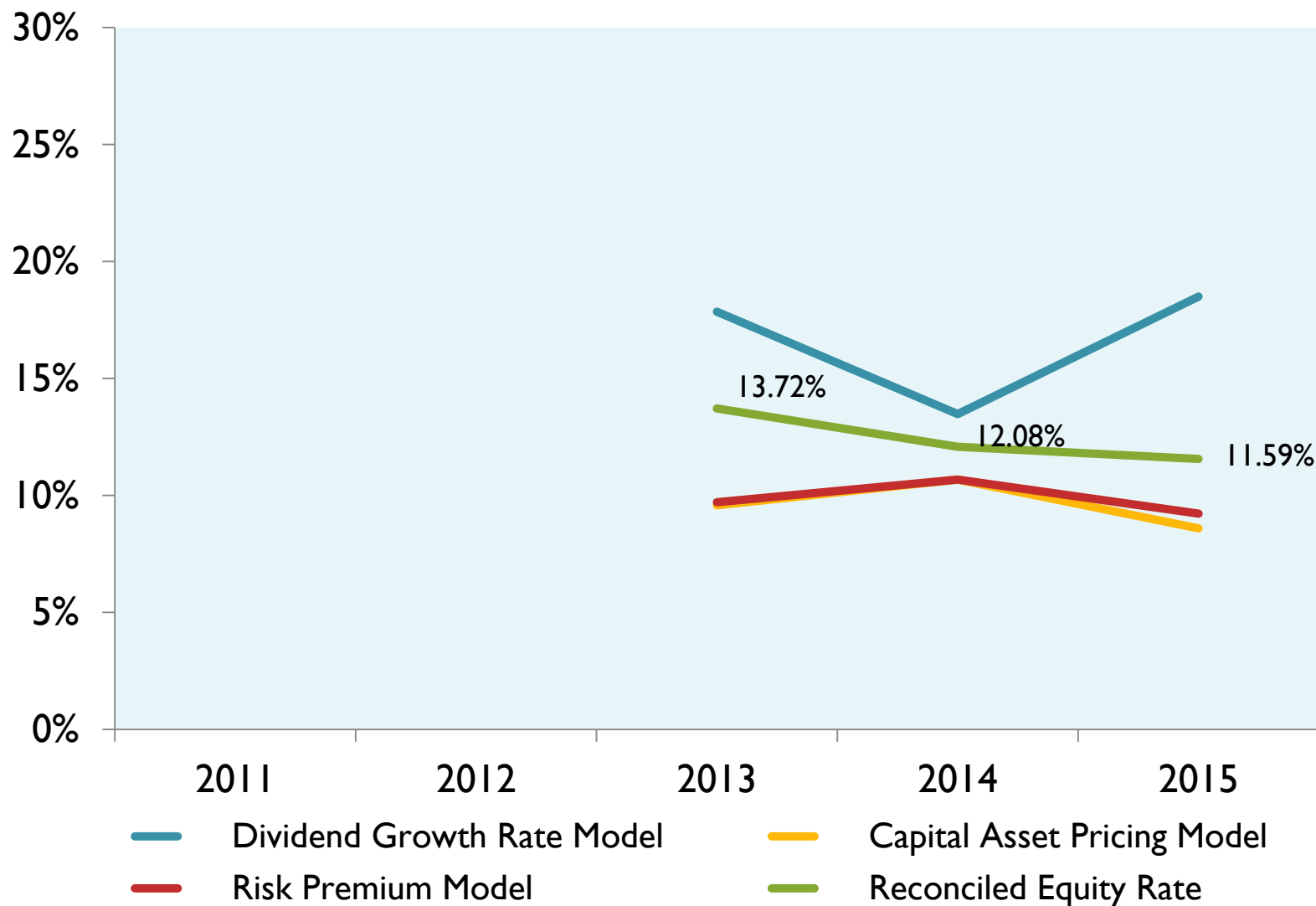
Three Year Capital Structure History



Three Year Debt Rate History



Three Year Equity Rate History



Gathering Discount Rate

WEIGHTED AVERAGE COST OF CAPITAL DISCOUNT RATE CALCULATION			
	RATE	CAPITAL STRUCTURE	WEIGHTED RATE
DEBT RATE (Ba2)	7.01%	35%	2.45%
EQUITY RATE	11.59%	65%	7.53%
BEFORE TAXES WACC			9.98%



Oil Price Forecast



Consumer

Producer





R884-24P-10

“Product Price”

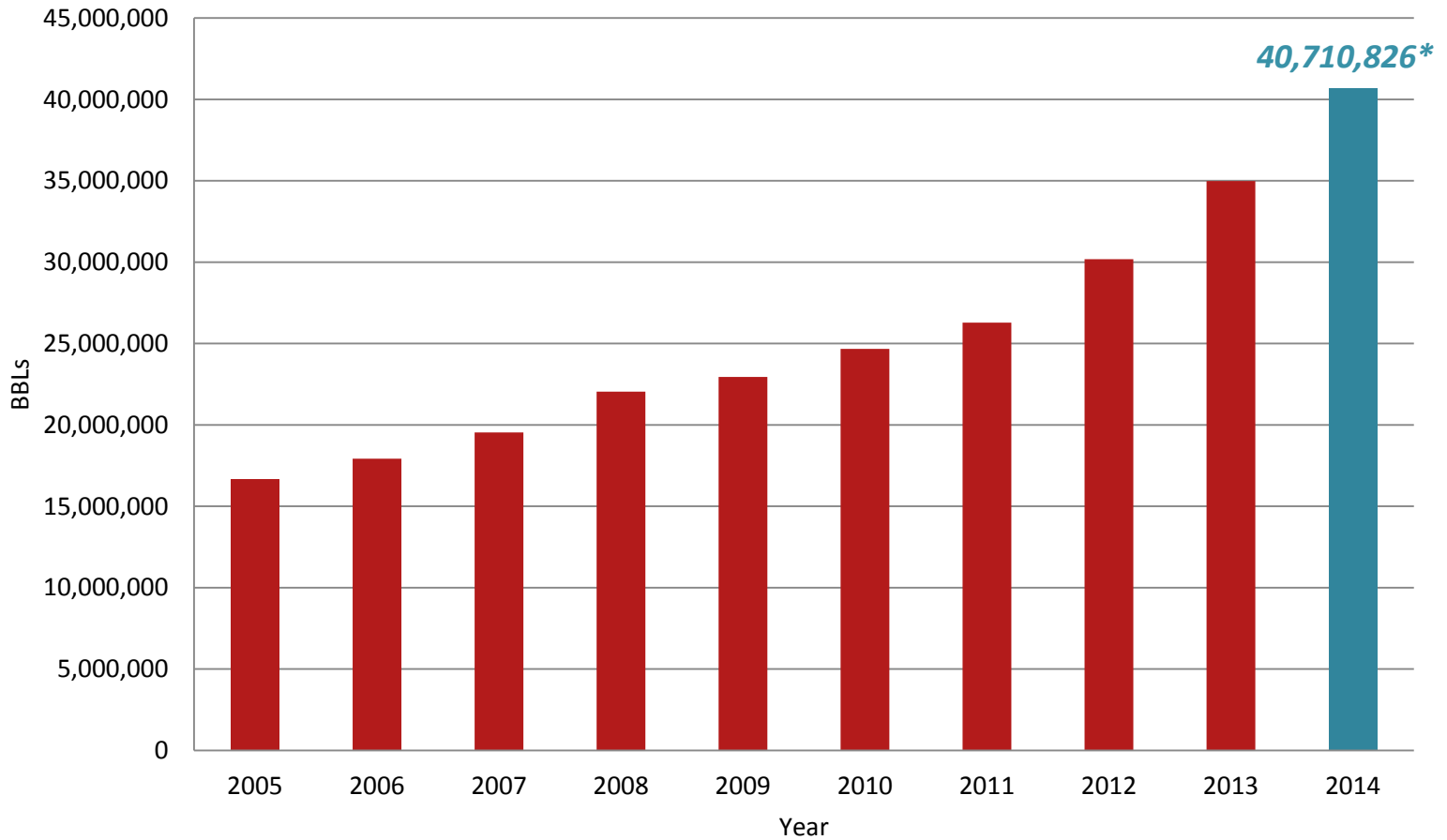
- Starting price is the weighted average posted price of the previous year

2014 Highlights

- Global supply
 - Saudis refuse to cut production in November
 - Conflict: ISIS, Ukraine-Russia
- WTI-Brent spread
 - Averaged less than \$6/bbl
- US oil production
 - Increased 16% from 2013
- Oil prices
 - Declined ~43% from June to December

2014 Utah – Oil Production

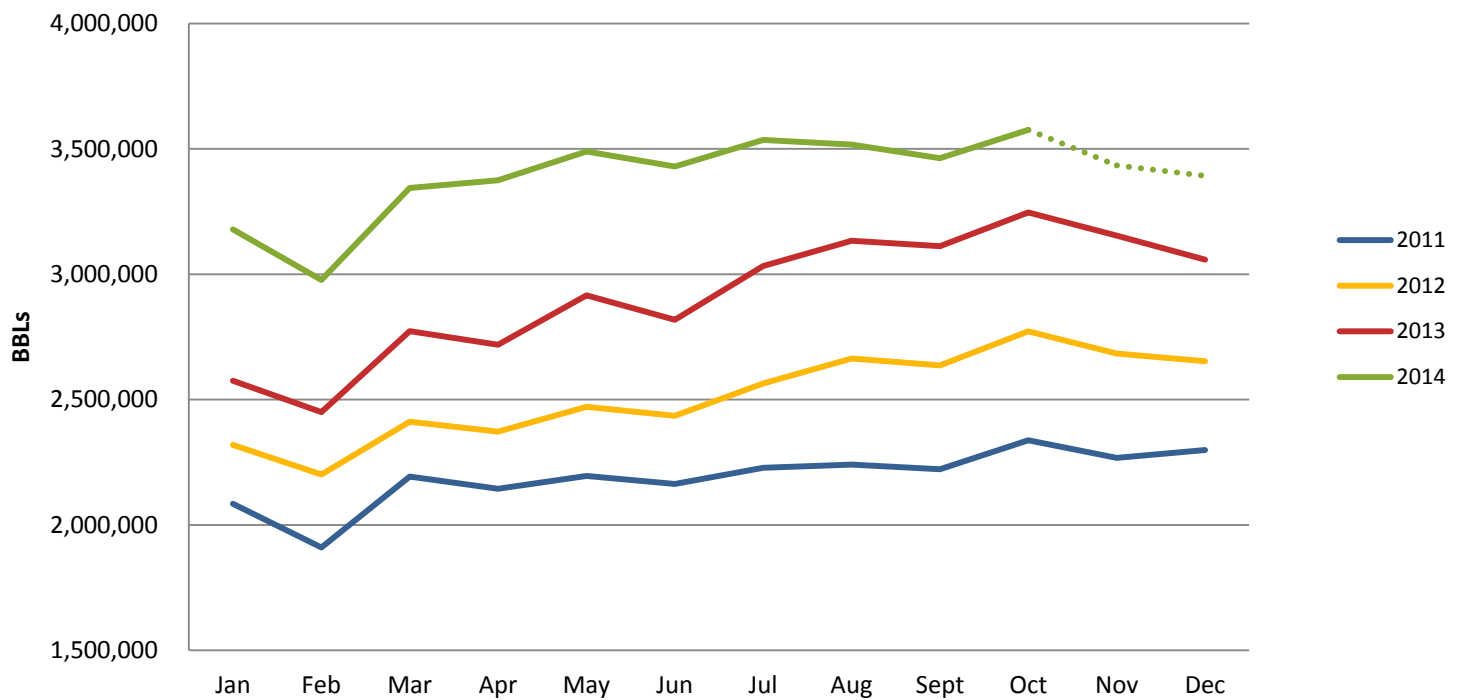
- by Year -



***The production is annualized for 2014. DOGM
Production reports available up to November 2014.**

2014 Utah – Oil Production

- by Month -



2015 Expectations

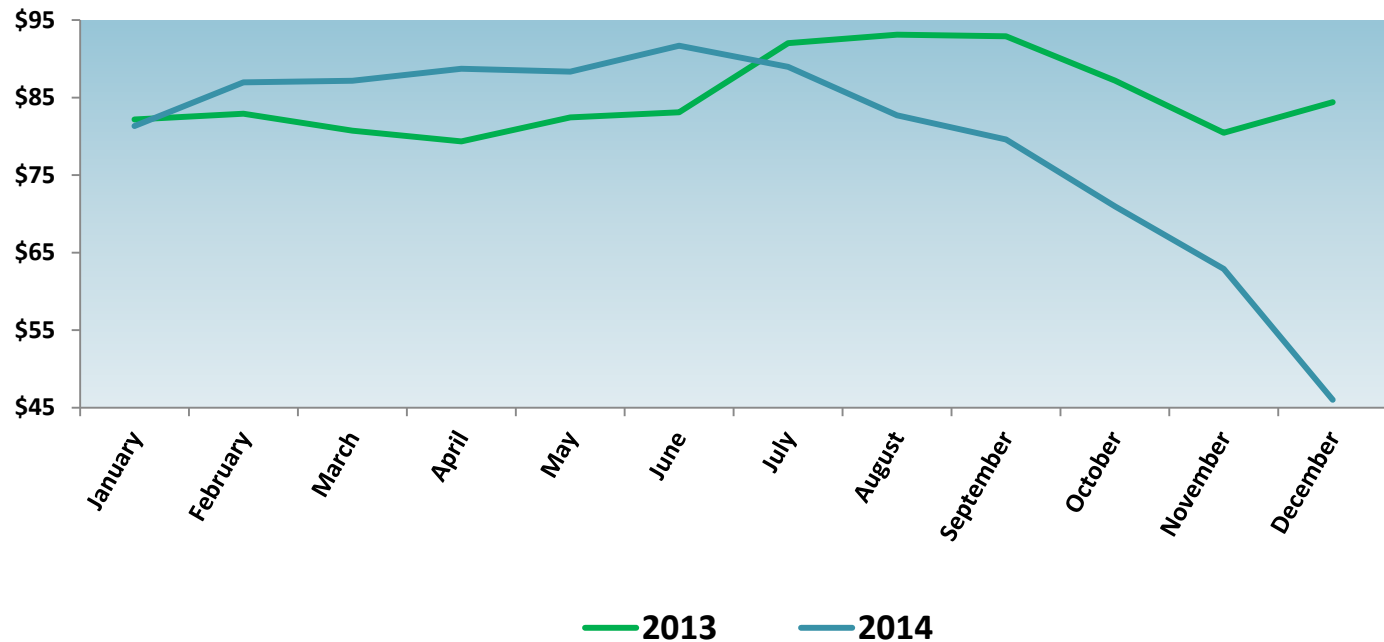
- Supply
 - Expected to grow
- Demand
 - Slowing
- U.S. Production
 - 8.6 mil b/d 2014
 - To 9.3 mil b/d 2015

PARADOX BASIN/SWEET - "GIANT"

MONTH	POSTING DAYS	WEIGHTED PRICE 2014	PREVIOUS YEAR 2013	% CHANGE
January	31	\$81.34	\$82.18	-1%
February	28	\$86.96	\$82.92	5%
March	31	\$87.18	\$80.74	8%
April	30	\$88.72	\$79.35	12%
May	31	\$88.36	\$82.44	7%
June	30	\$91.70	\$83.11	10%
July	31	\$88.98	\$92.03	-3%
August	31	\$82.71	\$93.11	-11%
September	30	\$79.59	\$92.92	-14%
October	31	\$70.97	\$87.20	-19%
November	30	\$62.90	\$80.46	-22%
December	31	\$46.02	\$84.40	-45%
Year End Weighted Monthly Average Price (\$/bbl)		\$79.62	\$85.07	-6%

WEIGHTED CRUDE OIL POSTED PRICES

Paradox Basin/Sweet - "Giant"

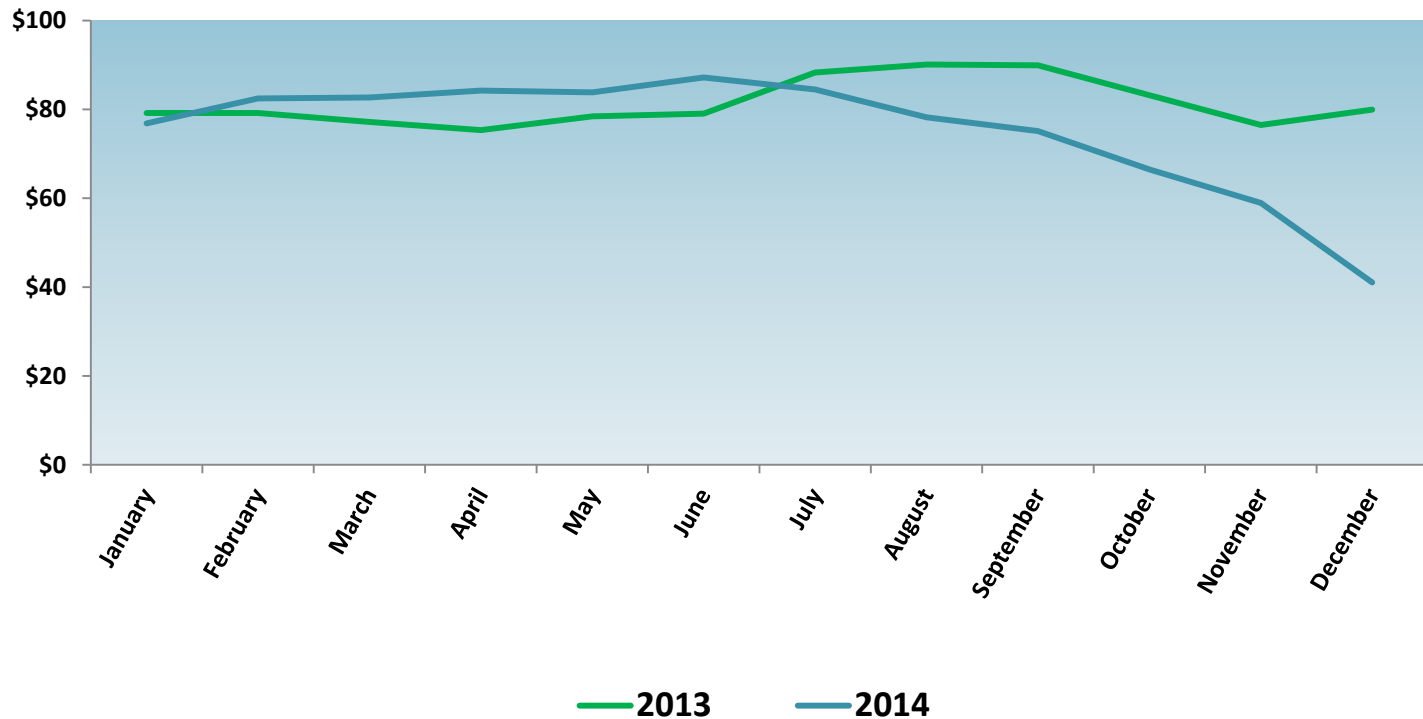


UINTA BASIN BLACK WAX - "CHEVRON"

MONTH	POSTING DAYS	WEIGHTED PRICE 2014	PREVIOUS YEAR 2013	% CHANGE
January	31	\$76.84	\$79.18	-3%
February	28	\$82.46	\$79.18	4%
March	31	\$82.68	\$77.19	7%
April	30	\$84.22	\$75.35	12%
May	31	\$83.84	\$78.45	7%
June	30	\$87.20	\$79.04	10%
July	31	\$84.48	\$88.29	-4%
August	31	\$78.21	\$90.12	-13%
September	30	\$75.11	\$89.92	-16%
October	31	\$66.47	\$83.20	-20%
November	30	\$58.94	\$76.48	-23%
December	31	\$41.03	\$79.94	-49%
Year End Weighted Monthly Average Price (\$/bbl)		\$75.12	\$81.36	-8%

WEIGHTED CRUDE OIL POSTED PRICES

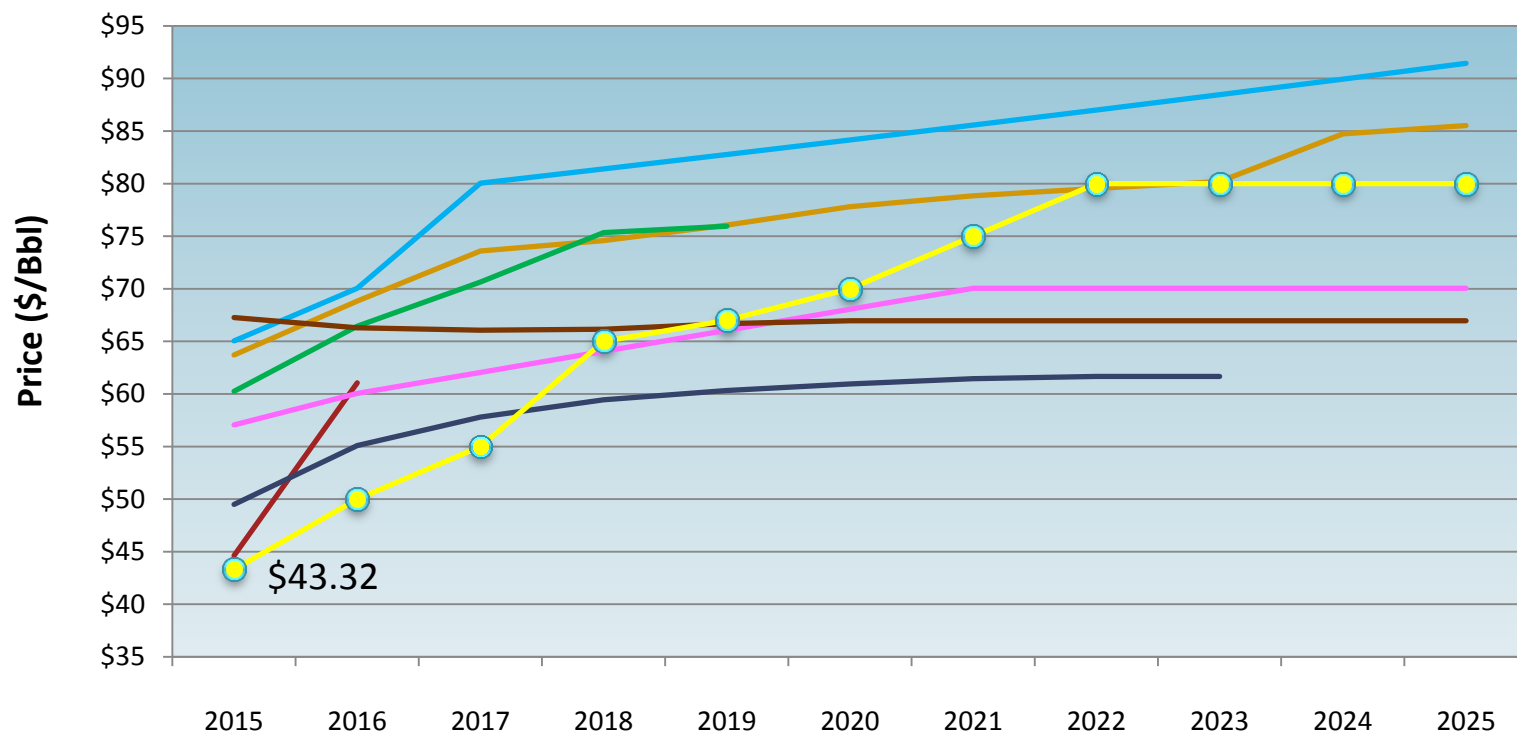
Uinta Basin Black Wax



Sources for Oil Price Forecasting

- ▶ U.S. EIA – United States Energy Information Administration
 - Short Term Outlook (STO)
 - Annual Energy Outlook (AEO)
 - *AEO was not available until April 2015
- ▶ EIU – Economist Intelligence Unit
 - Economic and Commodity Prices Forecast
- ▶ NYMEX (CME Group) – New York Mercantile Exchange for futures prices
- ▶ Sproule Associates – Petroleum consultants annual forecast
- ▶ AJM Deloitte – Petroleum consultant company annual forecast
- ▶ Texas Comptroller – Pritchard & Abbott, Inc. Method
 - ▶ *Couldn't calculate Pritchard & Abbott Method because it relies on AEO.
 - Price Adjustment Factor(PAF) & Producer Price Index(PPI)
- ▶ Macquarie Tristone – Energy lenders' price forecast survey
- ▶ Goldman Sachs – Finance and investment consultants annual forecast

2015 Paradox Oil Price Forecast



— EIA Short-Term

— AJM (Deloitte)

— CPI & PPI

— Macquarie Tristone

— Sproule

— NYMEX Futures (CME Group)

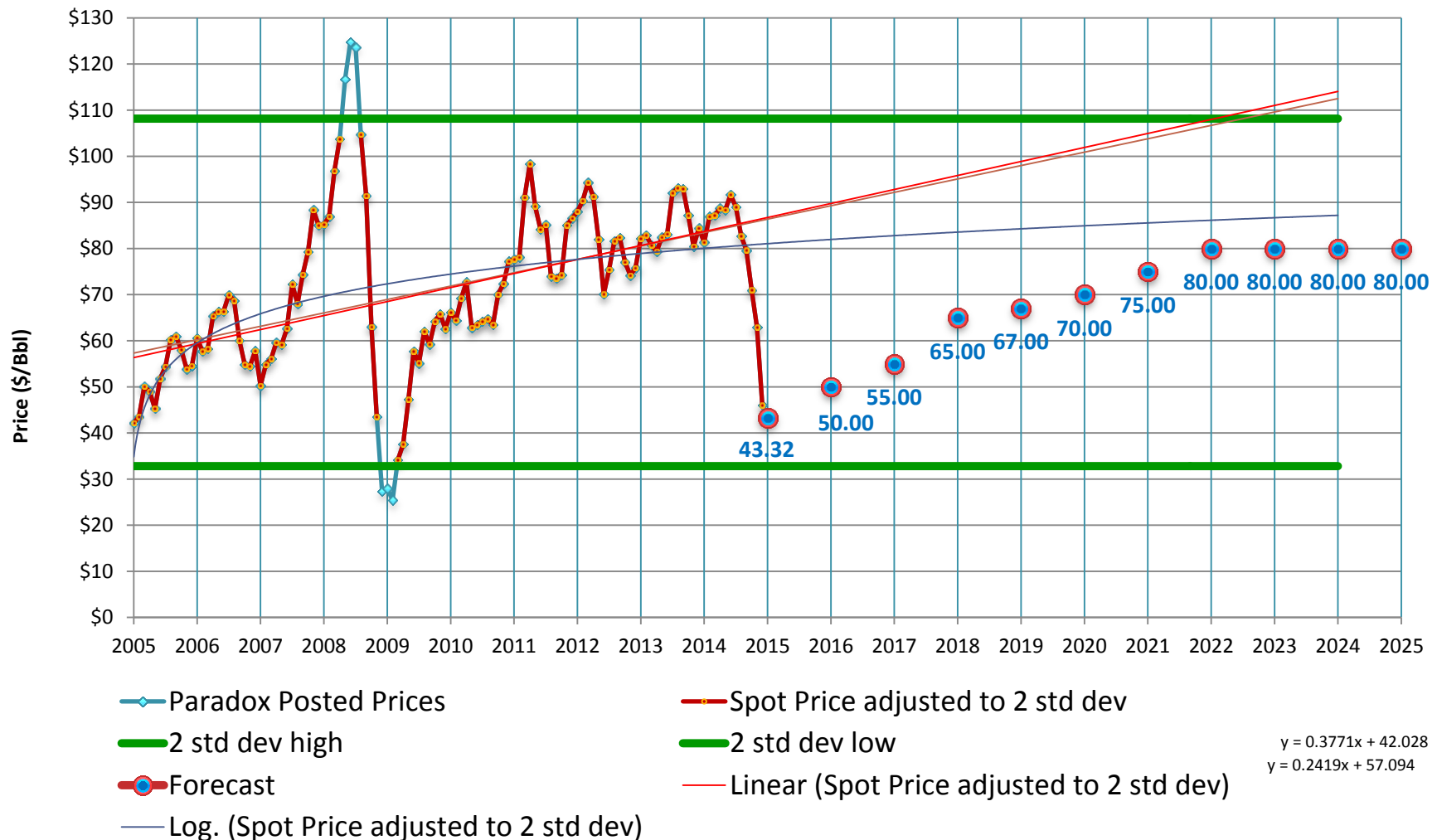
— Economic Intelligence Unit

— UT PTD

**For the 2015 assessment year, in order to achieve fair market value as stated in the Utah State Tax Code 59-2-201 (1)(a), the Property Tax Division deviated from R884-24P-10 (A)(7)(a) and used the spot price for oil.

2015 Paradox Oil Price Forecast

2 Std deviation
High & Low Out



2015 Oil Price Forecast

Paradox Basin Summary												
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Avg of 2013 Mthly Prices	85.07											
Forecast with High & Low (2 SD)		43.32	50.00	55.00	65.00	67.00	70.00	75.00	80.00	80.00	80.00	80.00
% Change			15.4%	10.0%	18.2%	3.1%	4.5%	7.1%	6.7%	0.0%	0.0%	0.0%

Black Wax Summary												
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Avg of 2013 Mthly Prices	81.36											
Forecast with High & Low (2 SD)		38.83	44.82	49.30	58.26	60.06	62.75	67.23	71.71	71.71	71.71	71.71
% Change			15.4%	10.0%	18.2%	3.1%	4.5%	7.1%	6.7%	0.0%	0.0%	0.0%



Natural Gas Price Forecast

Natural Gas Price Forecast



R884-24P-10

“Product Price”

- Starting price, as defined by Utah Tax Code, is:
 - (1) If sold under contract, the price shall be the stated price.
 - (2) If sold otherwise, the price shall be the weighted average price.

2014 Highlights

- The U.S. continued to lead the world in natural gas production
- Shale plays drove production growth
- After last winter, inventories were the lowest since 2003
- A strong injection season restored inventories

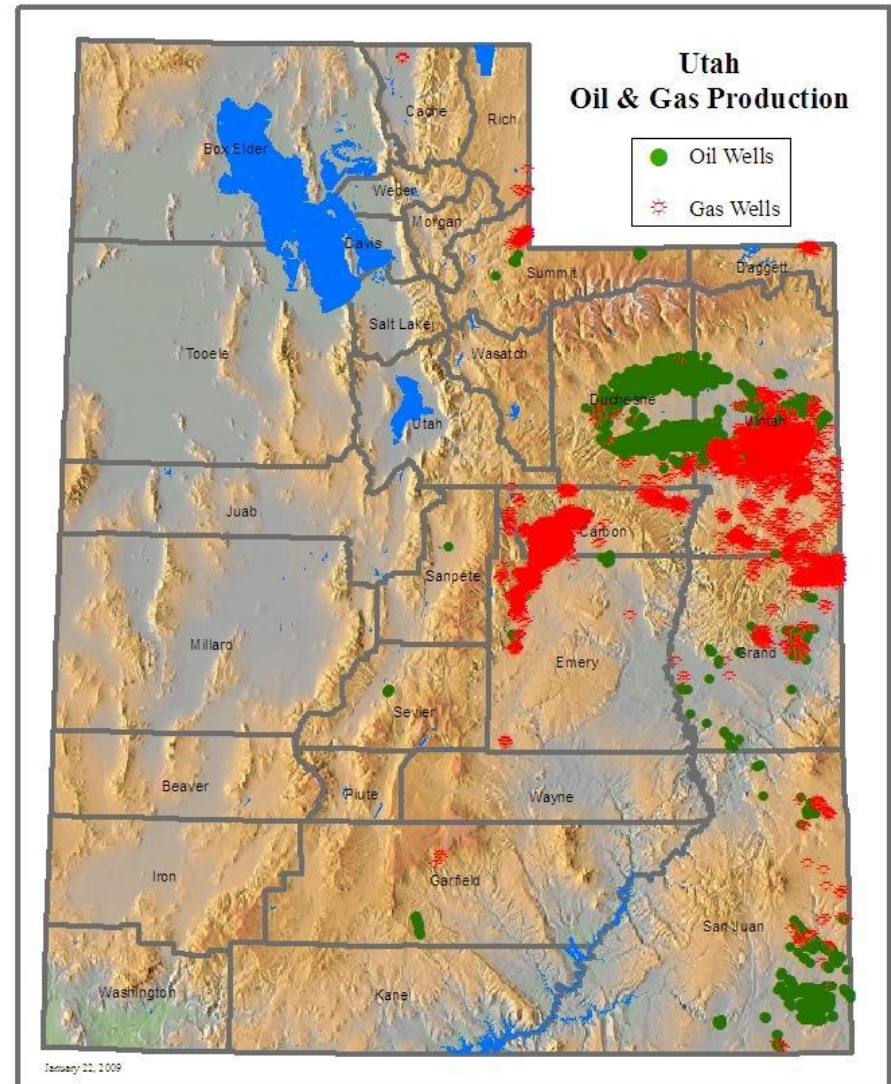
Utah - 2014

Data Analysis:

- Supply
- Drilling
- Production
- Storage

Other Variables:

- Consumption
- Weather
- Economy



2014 Utah - Permits

Applications for Permit to Drill (APD)

by County

	2014	2013	2012	2011
Carbon	34	7	93	138
Duchesne	511	794	745	539
Emery	0	6	1	2
Grand	29	12	17	11
Juab	1	1	1	0
Millard	2	2	0	0
San Juan	7	50	34	12
Sevier	2	1	1	2
Uintah	798	737	1213	802
Sub-total	1384	1610	2105	1506
State Totals	1387	1611	2105	1516

by Year

Year	Permits
2014	1384
2013	1611
2012	2105
2011	1516
2010	1186
2009	1171
2008	1359
2007	1553
2006	2061
2005	1630

2014 Utah - Drilling

Drilling Commenced (Wells Spudded)

by County

	2014	2013	2012	2011
Box Elder	0	0	3	0
Carbon	26	2	18	94
Daggett	0	1	0	0
Duchesne	433	441	420	348
Emery	1	2	1	1
Grand	14	7	13	2
Juab	1	0	1	1
Millard	2	2	0	0
San Juan	4	18	14	11
Sevier	1	0	1	3
Uintah	407	525	632	525
Sub-total	889	998	1103	985
State Totals	890	999	1103	986

by Year

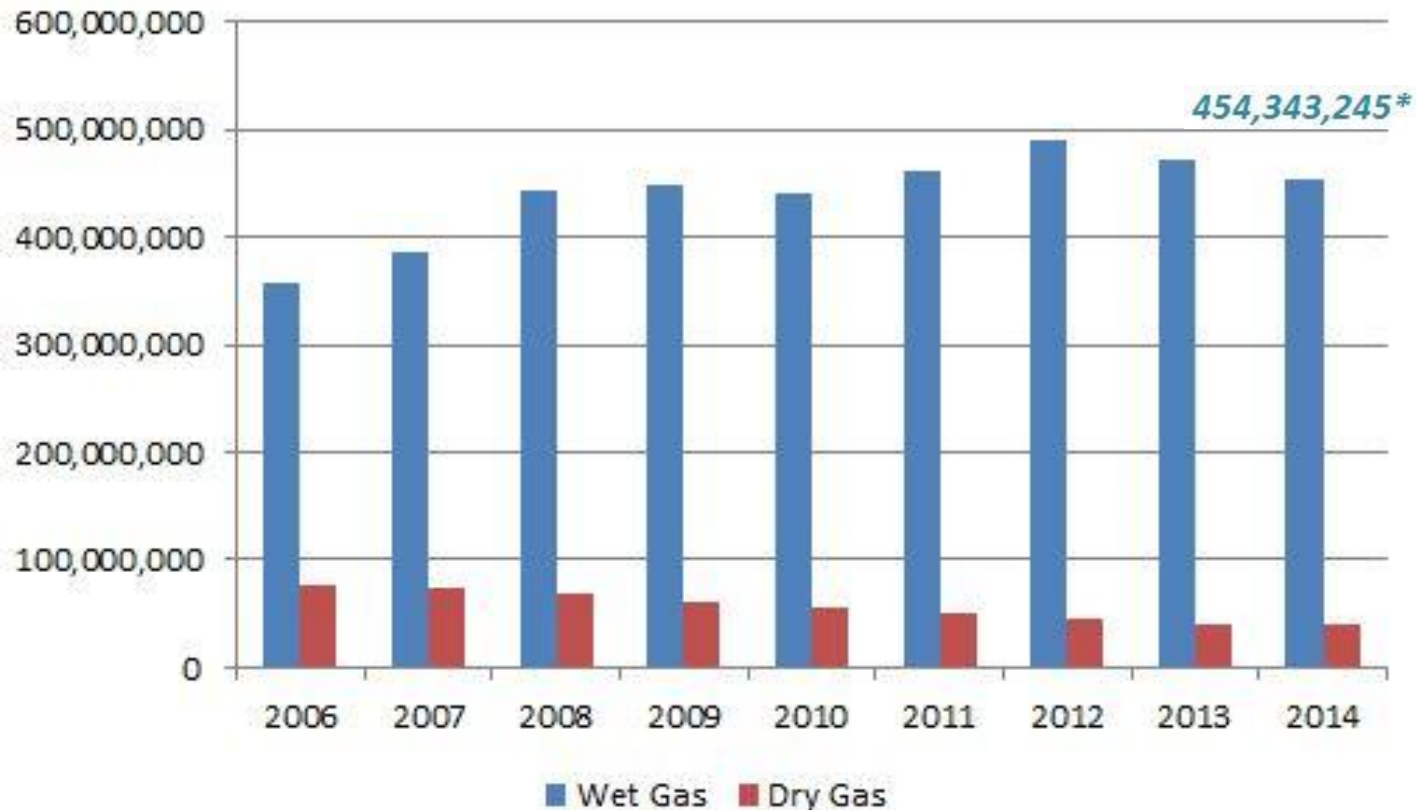
Year	Wells Spudded
2014	890
2013	999
2012	1103
2011	986
2010	972
2009	515
2008	1148
2007	1138
2006	1068
2005	890

by Month

	2014	2013	2012	2011
January	87	72	89	74
February	72	87	99	75
March	70	80	108	57
April	86	76	103	59
May	81	88	112	99
June	71	58	89	69
July	80	83	113	100
August	70	91	98	100
September	72	90	106	67
October	76	69	75	92
November	63	100	50	108
December	62	105	61	86
Total	890	999	1103	986

2014 Utah - Production

- by Year -



*The production is annualized for 2014

2014 Utah - Storage

- Storage volume was 7% below the previous 5-year average in November
- Working supply was 19% below the previous 5-year average in November
- November withdrawals were the highest since the year 2000

Weather

- Heating Degree Days(HDD) are forecast to be 3% lower than the 10 year average
- Sources & Predictions:
 - NOAA/National Weather Service Outlook:
 - Winter forecast
 - Above average precipitation in the South and along Eastern seaboard
 - Above average temperatures
 - The Farmers Almanac
 - Winter forecast
 - Snowier than normal over the eastern third of the country
 - Below normal temperatures for 75% of the nation

Economy

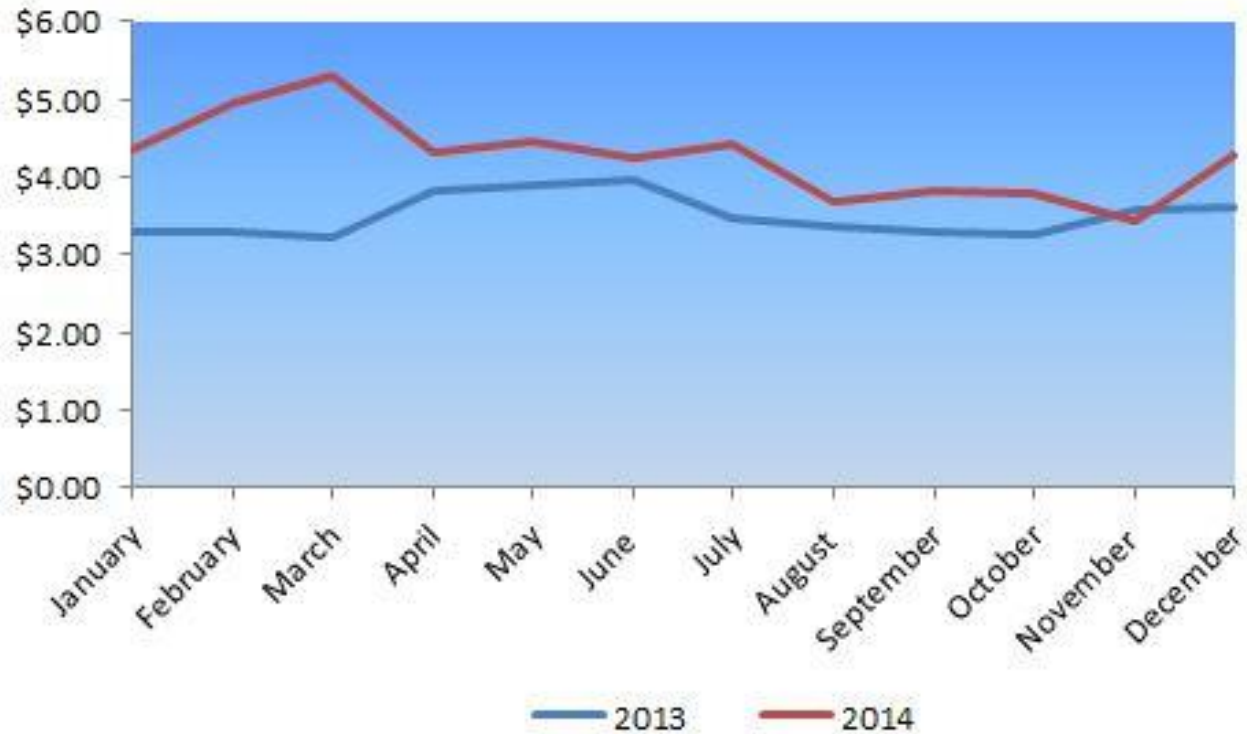
- The world economy is struggling while the US economy is continuing to strengthen
 - GDP predicted to grow at 3%
 - Inflation Rate forecast to be 1% to 1.6%
- Pressure on natural gas prices will remain similar to 2014 as production increases

NORTHWEST PIPELINE - OPAL, WYOMING

MONTH	POSTING DAYS	WEIGHTED PRICE 2014	PREVIOUS YEAR 2013	% CHANGE
January	31	\$4.36	\$3.28	33%
February	28	\$4.96	\$3.28	51%
March	31	\$5.31	\$3.23	64%
April	30	\$4.32	\$3.82	13%
May	31	\$4.45	\$3.90	14%
June	30	\$4.23	\$3.95	7%
July	31	\$4.42	\$3.45	28%
August	31	\$3.69	\$3.37	9%
September	30	\$3.83	\$3.29	16%
October	31	\$3.79	\$3.27	16%
November	30	\$3.42	\$3.57	-4%
December	31	\$4.28	\$3.60	-19%
Year End Weighted Monthly Average Price (\$/MCF)		\$4.26	\$3.50	22%

Weighted Spot Prices

NORTHWEST PIPELINE – OPAL, WYOMING



Sources for Natural Gas Price Forecasting

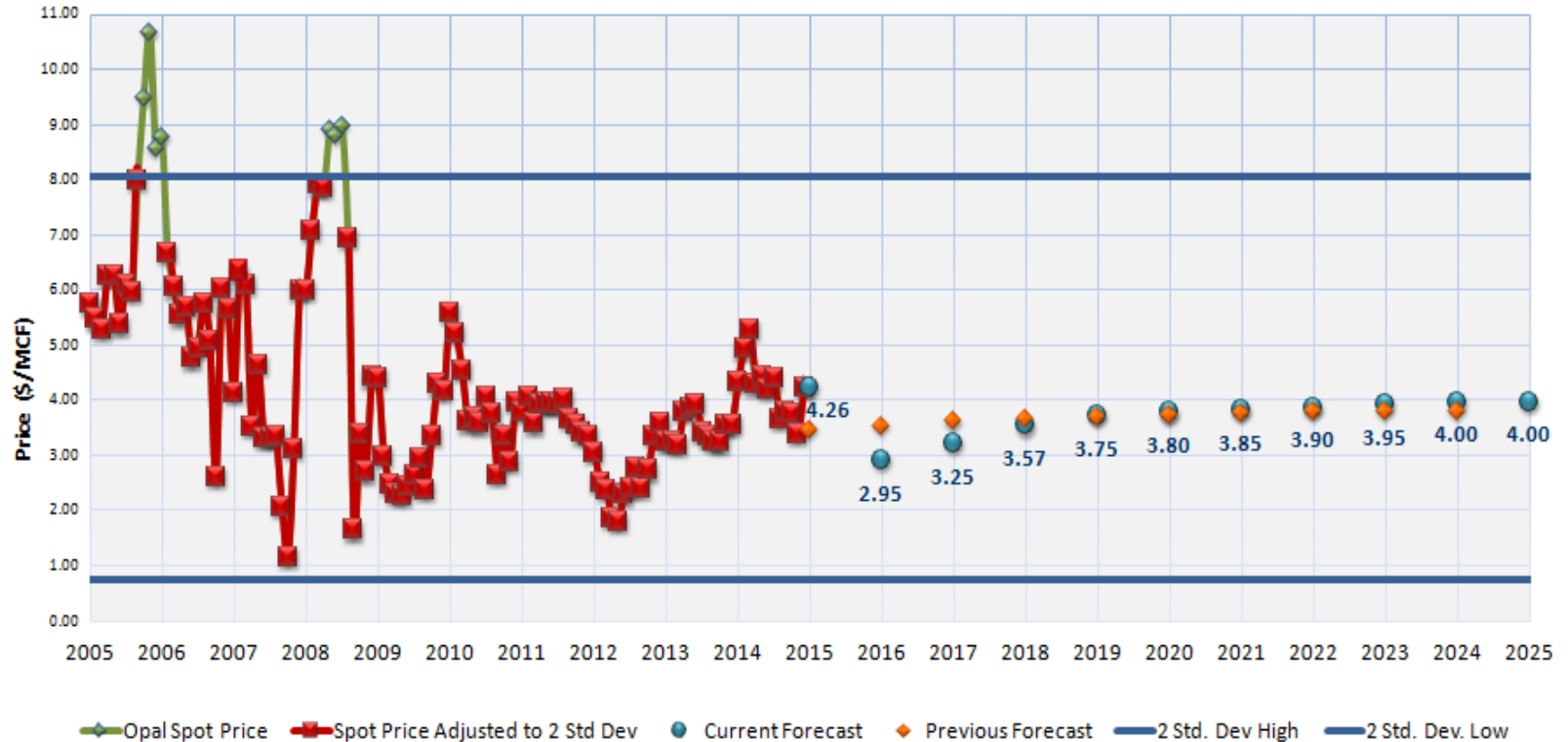
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2015 Gas Price Forecast Adjusted to Opal, Wyoming



2015 Gas Price Forecast

2 Standard Deviations
High and Low Out



2015 Gas Price Forecast

Opal, Wyoming												
Summary												
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Start Price	3.50											
Forecast with High & Low Out		4.26	2.95	3.25	3.57	3.75	3.80	3.85	3.90	3.95	4.00	4.00
% Change			-30.8%	10.0%	10.0%	5.0%	1.5%	1.3%	1.3%	1.3%	1.3%	0.0%

2015 Expectations

- Supply
 - Adequate to meet demand this winter
- Demand
 - Increases will be seen in industrial and electric power sectors while residential and commercial demand should decline
- Production
 - 2015 is forecast to be the 10th consecutive year of production gains